

ABSTRACT OF THE DISCLOSURE

An architecture provides the ability to create and maintain multiple instances of virtual servers, such as virtual filers (vfilers), within a server, such as a storage appliance. A vfiler is a logical partitioning of network and storage resources of the storage appliance platform to establish an instance of a multi-protocol server. Each vfiler is allocated a
5 subset of dedicated units of storage resources, such as volumes or logical sub-volumes (qtrees), and one or more network address resources. Each vfiler is also allowed shared access to a file system resource of a storage operating system. To ensure controlled access to the allocated and shared resources, each vfiler is further assigned its own security
10 domain for each access protocol. A vfiler boundary check is performed by the file system to verify that a current vfiler is allowed to access certain storage resources for a requested file stored on the filer platform.